

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

)	
In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
Universal Service Reform – Mobility Fund)	WT Docket No. 10-208
)	

REPLY COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”)¹ respectfully submits these reply comments in response to the record and the Federal Communications Commission’s (“FCC” or “Commission”) *Report and Order and Further Notice of Proposed Rulemaking*, seeking comment on Mobility Fund Phase II (“MF II”) reform.²

As demonstrated by the record in this proceeding, it is imperative that the Commission implement a robust, efficient, and targeted challenge process for the MF II program. CCA agrees that, if designed correctly, the challenge process and a robust data collection will promote the inclusion of rural and Tribal communities in today’s digital economy.³ To that end, CCA supports comments in the record advocating for a data collection method and challenge process

¹ CCA is the nation’s leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 customers to regional and national providers serving millions of customers. CCA also represents approximately 200 associate members including vendors and suppliers that provide products and services throughout the mobile communications supply chain.

² *Connect America Fund, Universal Service Reform – Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, WC Docket Nos. 10-90 & 10-208 (Mar. 7, 2017) (“*Report and Order*” or “*Further Notice*”).

³ *Id.* ¶ 226.

that is efficient, eases burdens on smaller entities, and generates accurate determinations of where qualifying coverage exists and where the Commission should target MF II support.⁴

I. THE COMMISSION SHOULD ADOPT A ROBUST CHALLENGE PROCESS THAT PROVIDES TARGETED, DEMONSTRABLE RESULTS.

CCA shares the Commission's and industry's vision for a successful MF II program that includes a robust and effective challenge process. First, CCA reiterates its support for the process proposed in Option A. Specifically, consistent with comments in the record, the Commission should enable challenging parties to certify that the party has a "good faith belief" based on actual knowledge or past data collection that an area is unserved.⁵ The FCC should then allow the challenged party to respond with a propagation map, and permit the challenger to submit evidence of actual, on-the-ground speeds provided to consumers, effectively updating the current inconsistencies of FCC Form 477 data.⁶ As the record reflects, this approach will reduce the burden on small providers, and promote more accurate results regarding areas deemed eligible or ineligible for MF II support.⁷

Likewise, the Commission should refrain from unreasonably restricting certain parameters of the challenge process. CCA echoes commenters' requests that the challenge process be accessible by all interested parties, including service providers, governmental entities,

⁴ See, e.g., Comments of Competitive Carriers Association, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("CCA Comments"); Comments and Petition for Reconsideration of CTIA, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("CTIA Comments"); Comments of Deere & Company, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("Deere Comments"); Comments of Mosaik Solutions, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("Mosaik Comments"); Comments of NTCA – The Rural Broadband Association, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("NTCA Comments"); Comments of the Rural Wireless Association, Inc., WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("RWA Comments"); Comments of T-Mobile, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) ("T-Mobile Comments").

⁵ See CCA Comments at 2-4,12; Deere Comments at 6.

⁶ *Further Notice* ¶¶ 232, 236, 238.

⁷ See Deere Comments at 4; Mosaik Comments at 3; NTCA Comments at 2, 6-7.

and consumers who are best able to attest to the quality of service in their communities.⁸ As Deere explains, “[t]here is no public interest reason to prohibit stakeholders willing to invest the time and resources to collect improvement data meeting the Commission’s specific requirements and standards from participating in the process.”⁹ At the same time, the Commission should refrain from limiting the challenge process to a minimum area requirement.¹⁰ CCA agrees that excluding areas based solely on their size risks dismissing service coverage around important resources such as roads, public institutions, or agricultural operations.¹¹

While CCA continues to support Option A,¹² CCA likewise applauds industry efforts to further define certain aspects of the MF II challenge process.¹³ Specifically, CCA supports CTIA’s proposed “Option C,” to the extent it will ensure challenges are targeted to identify initial eligible areas¹⁴ and help to create reliable data.¹⁵ To that end, CCA supports proposals provided in Stage I of Option C requiring that provider data be submitted using “consistent settings and assumptions that are tailored to facilitate identification of unserved rural areas for MF II purposes.”¹⁶ CCA likewise agrees that these submissions should be certified by an engineer or officer of a company, or independent third party.¹⁷

⁸ See CTIA Comments at 17; Deere Comments at 4-5.

⁹ Deere Comments at 5.

¹⁰ See *id.* at 7; CCA Comments at 8.

¹¹ See *id.*; Deere Comments at 7.

¹² See, e.g., CCA Comments.

¹³ See, e.g., Comments of ATN International and Buffalo-Lake Erie Wireless Systems LLC d/b/a Blue Wireless, WT Docket No. 10-208, WC Docket No. 10-90 (filed Apr. 26, 2017) (“ATN-Blue Comments”); CTIA Comments; NTCA Comments; RWA Comments; T-Mobile Comments at 3.

¹⁴ CTIA Comments at 9.

¹⁵ *Id.* at 11.

¹⁶ *Id.* at 4.

¹⁷ *Id.* at 5; CCA Comments at 3, 18.

Further, consistent with Stage III of Option C, CCA echoes assertions that any challenge process adopted should begin with the requirement that challengers submit detailed proof of lack of coverage in a challenged area, including standardized test data and maps. As CTIA notes, the Commission should require responding parties to provide signal strength data in addition to download speed information.¹⁸ At the same time, CCA reiterates that any data collection or challenge process should include at least: standardized Reference Signal Received Power (“RSRP”) levels; map files and/or data produced using a determined clutter factor, including clear indications of the precise loss values assigned to the clutter and feeder type; delineated bin sizes at a sufficiently high resolution; and Remote Radio Head (“RRH”) power differences.¹⁹

In the alternative, the Commission must correct data inaccuracies in the challenge process, and do so beginning with a detailed Radio Frequency (“RF”) Link Budget submission. To minimize burdens on carriers, the Commission should require providers to conform to the following specifications. First, in addition to other assumptions, CCA agrees with CTIA’s proposal that includes the assumption that maximum allowable path loss should be sufficient to support LTE data transmissions at 5 Mbps on the downlink and VoLTE.²⁰ Further, cell edge probability should be delineated at the very least at 90% and the area probability should be 95%.²¹ The amount of spectrum to be modeled should be the provider’s deployed spectrum holdings in the relevant geography or at least a minimum of the provider’s spectrum holdings in the geography, where 4G LTE service has been deployed.²² The frequencies modeled should be

¹⁸ *Id.* at 16; CTIA Comments at 20-21.

¹⁹ CCA Comments at 11-12.

²⁰ CTIA Comments at 12.

²¹ *Id.*

²² *Id.*

representative of the provider's deployed spectrum holdings in the geography and consistent with the provider's holdings where 4G LTE service has been deployed.

Further, site and antenna configurations should be representative of 4G LTE deployments. As CTIA suggests, modulation should be delineated as Quadrature Phase Shift Keying "QPSK", for maximum path-loss indicating cell edge conditions.²³ Likewise, CCA agrees that cell loading, including interference margin calculation, should equal 50% on the downlink.²⁴

Additionally, the Link Budget assumptions should include "Thermal Noise Density," or noise power density per one-hertz, and be standardized at -174dBm. Similarly, maps should be held to a 1Mbps uplink standard. Lastly, handset user equipment ("UE") total radiated power ("TRP") should be standardized for low-band and mid-band frequency assumptions, with values of 20dBm for mid-band, and 18dBm for low-band. Carriers should refrain from applying the 3GPP standard of 23dBm because it is not representative of actual device performance. The Commission must delineate these parameters to successfully standardize challenge process submissions.

Finally, regardless of the challenge process adopted, this updated data must replace the current inaccurate and inconsistent data, and should be updated annually, so the Commission has consistent and accurate data going forward on which to rely for any and all policy decisions including Universal Service decisions.²⁵ Additionally, CCA agrees that all submissions must reflect on-the-ground coverage data, subject to certain parameters,²⁶ and that shapefile maps

²³ *Id.*

²⁴ *Id.*

²⁵ *Further Notice* ¶ 58.

²⁶ *See, e.g.,* CCA Comments; CTIA Comments at 18.

should be submitted within 60 days of the Commission’s issuance of a Public Notice requesting this data.²⁷ As noted above, CCA echoes recommendations in the record encouraging the FCC to provide sufficient flexibility with respect to the type of supporting documentation that a challenger may provide.²⁸ For example, and as noted in more detail below, challengers should be allowed to provide drive test results, tests conducted by third-party applications, or results from network engineering analyses.

II. RIGOROUS AND RELIABLE EVIDENCE IS IMPERATIVE TO RESPONSIBLY DISTRIBUTING MF II FUNDS.

To ensure that limited resources allocated for Mobility Fund II are put to their best use, CCA agrees that the Commission must standardize the unreliable and inconsistent underlying data to present accurate, on-the-ground broadband coverage that reflects consumers’ actual mobile experiences.²⁹ As an initial matter, CCA echoes overwhelming assertions in the record that Form 477 data often is inconsistent,³⁰ and should not be relied upon to determine ultimate distribution of MF II funds,³¹ or any policy decision, for that matter. Moving forward, and as acknowledged in the *Further Notice*, the FCC must have more reliable information than the current Form 477 data set to determine “eligibility areas.”³² Importantly, the Commission does not restrict this data collection solely to Mobility Fund II eligibility determinations, and instead could apply this updated data in other policy contexts, including decisions related to Connect

²⁷ CTIA Comments at 12.

²⁸ *Id.* at 18-21; CCA Comments at 13.

²⁹ See CCA Comments at 16; CTIA Comments at 18; Deere Comments at 6-7; NTCA Comments at 5, 8; RWA Comments at 6.

³⁰ See, e.g., CCA Comments; CTIA Comments; Deere Comments at 5-6; Mosaik Comments at 1-2; NTCA Comments at 3-4; RWA Comments; T-Mobile Comments at 2.

³¹ CCA agrees that the Commission should defer from releasing Form 477 data until it adopts final procedures for the MF II program. See T-Mobile Comments at 1-2.

³² *Further Notice* ¶ 55.

America Fund II distributions.³³ As a result, whether through updates to Form 477 or otherwise, the Commission's primary goal should be to create a uniform, single set of data that is routinely updated each year.

Moving forward, while CCA agrees with NTCA – The Rural Broadband Association's concession that the Commission use Form 477 data to make "*preliminary*" eligibility determinations,³⁴ it is imperative that the FCC ensure that sound mechanisms are implemented to collect robust, consistent data prior to distributing MF II funds. Once the scope of eligible areas is determined, the Commission should adopt evidentiary requirements and a burden of persuasion that promote efficiency, reduce burdens, and generate accurate results. As suggested in the record, to demonstrate the actual speeds provided to consumers, the Commission should require speed and signal strength testing at a sufficient number of points within the challenged area.³⁵ Similarly, CCA supports recommendations that the Commission determine that an ineligible party prove by a preponderance of the evidence that an area actually is served.³⁶ CCA likewise agrees with comments encouraging the Commission to allow for collection of speed data gathered by a variety of methods including drive testing and applications on consumer devices.³⁷ Upon review, the Commission should weigh this data in accordance with their reliability.³⁸

³³ *Id.* ¶ 58.

³⁴ NTCA Comments at 5.

³⁵ *See* CTIA Comments at 19; Deere Comments at 9.

³⁶ *See* NTCA Comments at 9.

³⁷ *See, e.g.,* Mosaik Comments; CTIA Comments at 18; Deere Comments at 7-8.

³⁸ *See* CCA Comments at 3, 17-18.

III. CCA LOOKS FORWARD TO ONGOING WORK WITH CONGRESS AND THE COMMISSION TO IMPLEMENT A ROBUST MF II PROGRAM.

CCA shares industry's commitment to work alongside Congress and the Commission to achieve the shared goal to standardize data collection practices.³⁹ Currently, there is legislation before the House of Representatives, H.R. 1546 The Rural Wireless Act of 2017, introduced by Dave Loebsack (D-IA) which would direct the FCC to establish a methodology for mobile wireless coverage data that reflects actual consumer connectivity experience. As Congressman Loebsack has stated, “[w]e can’t invest in wireless access without accurately understanding the problem. Not only does building out wireless access create jobs, but it is necessary for our rural communities to thrive and be competitive in the 21st Century.”⁴⁰ And just today, Senators Wicker (R-MS), Manchin (D-WV), Schatz (D-HI), Fischer (R-NE), Klobuchar (D-MN), Peters (D-MI), and Moran (R-KS) introduced a Senate bill, The Rural Wireless Act of 2017, to ultimately increase the efficiency of coverage data collection and analysis. CCA shares Senator Wicker’s “consistently expressed concern that FCC’s data does not reflect the real mobile broadband experience of consumers in rural America.”⁴¹ As Senator Manchin noted, “[t]his legislation is an important step towards ensuring our ongoing efforts to close the broadband gap are guided by a realistic understanding of the mobile broadband coverage currently available to

³⁹ See Letter from Sens. Wicker (R-MS) and Manchin (D-WV), U.S. Senate, to The Hon. Ajit Pai (Apr. 12, 2017), *available at* https://www.wicker.senate.gov/public/_cache/files/d2d30dd8-76f2-4c45-8d3a-b64c9018265c/041217-fcc-rural-broadband-auctions-task-force-letter.pdf (noting that “coverage data that accounts for the actual consumer experience in our rural communities is a necessary step in the effort to close the digital divide”); and Opening Statement of Hon. Marsha Blackburn. Subcommittee on Communications and Technology, “Broadband: Deploying America’s 21st Century Infrastructure” (115 Cong.) (Mar. 21, 2017), *available at* <http://docs.house.gov/meetings/IF/IF16/20170321/105740/HHRG-115-IF16-MState-B001243-20170321.pdf> (noting, “we must accurately collect and aggregate data ... but doing so is a fool’s errand without precise data. This will ensure that private and federal investments are targeted at unserved areas”).

⁴⁰ See Press Release, *Loebsack Introduces Legislation to Improve Rural Wireless Coverage* (rel. Mar. 16, 2017), *available at* <http://loebsack.house.gov/news/documentsingle.aspx?DocumentID=394999>.

⁴¹ See U.S. Senate Press Release, *Senators Introduce Bipartisan Bill to Expand Broadband Deployment Using Accurate Coverage Maps* (rel. May 11, 2017).

rural consumers.”⁴² And Senator Moran agreed, stating, “[m]illions of rural Americans in Kansas and many other states depend on the promise of mobile broadband buildout efforts, and this critical expansion depends on the accuracy of current coverage data and uniformity in how it is collected.”⁴³ In the wake of these efforts, CCA looks forward to ongoing collaboration with policymakers to answer Congress’ call for sound data as the fundamental foundation to closing the digital divide and enabling an economic future throughout every sector of modern life.

IV. CONCLUSION.

Over the next ten years, the FCC will make approximately \$4.53 billion available to fill coverage gaps, and it is imperative that the Commission make these decisions based on solid, accurate data, and a robust challenge process. CCA looks forward to ongoing collaboration with the Commission and industry to ensure the Mobility Fund II program meets the Commission’s standard for fiscal responsibility, while inspiring deployment of ubiquitous mobile broadband services to all areas of the United States.

Respectfully submitted,

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May 11, 2017

⁴² *Id.*

⁴³ *Id.*